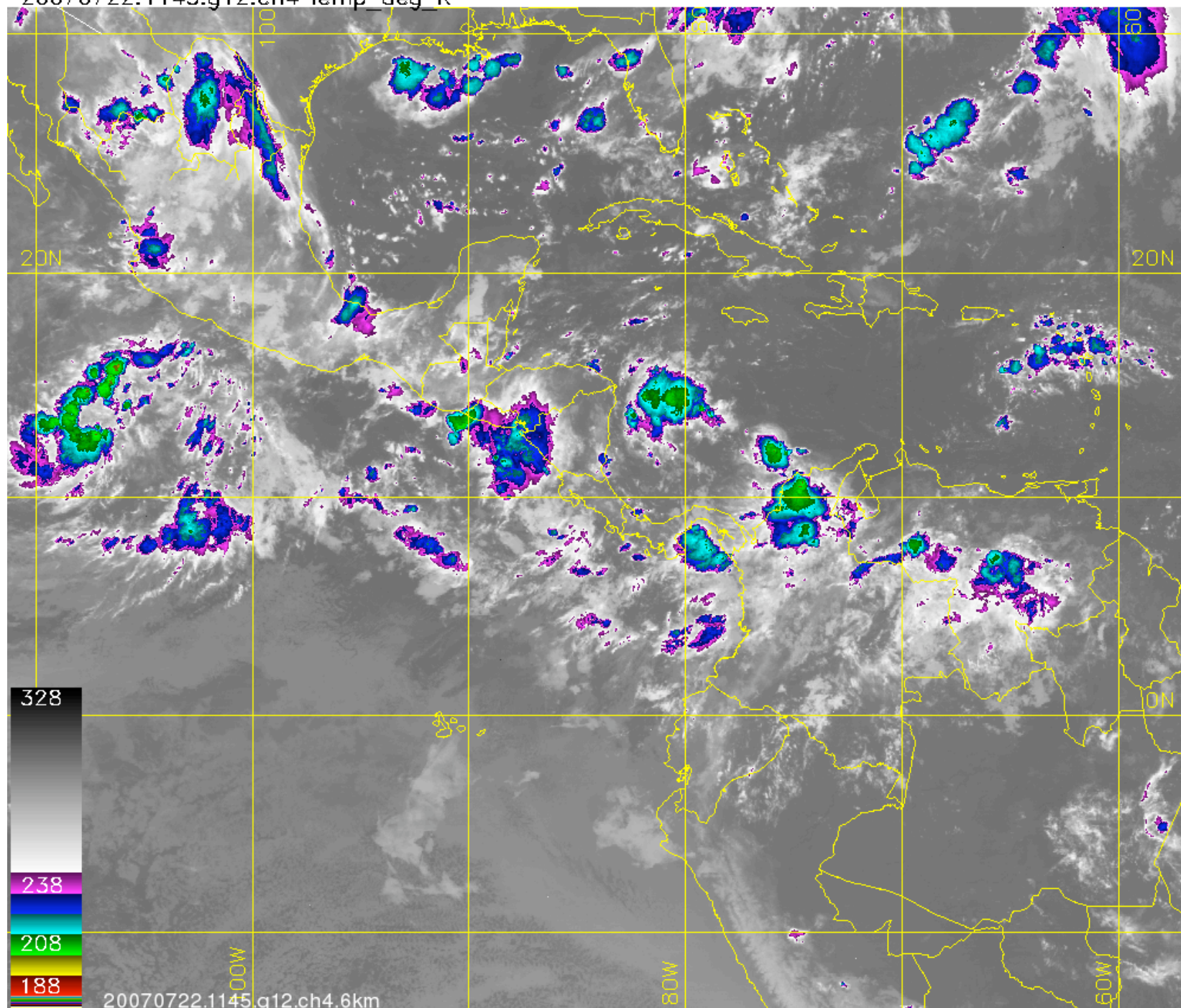


# Weather Brief, 20070723

Contributions from Lenny Pfister, Erick  
Rivera, Karen Rosenlof, Chuck  
Bardeen, and Evelyn Quiros

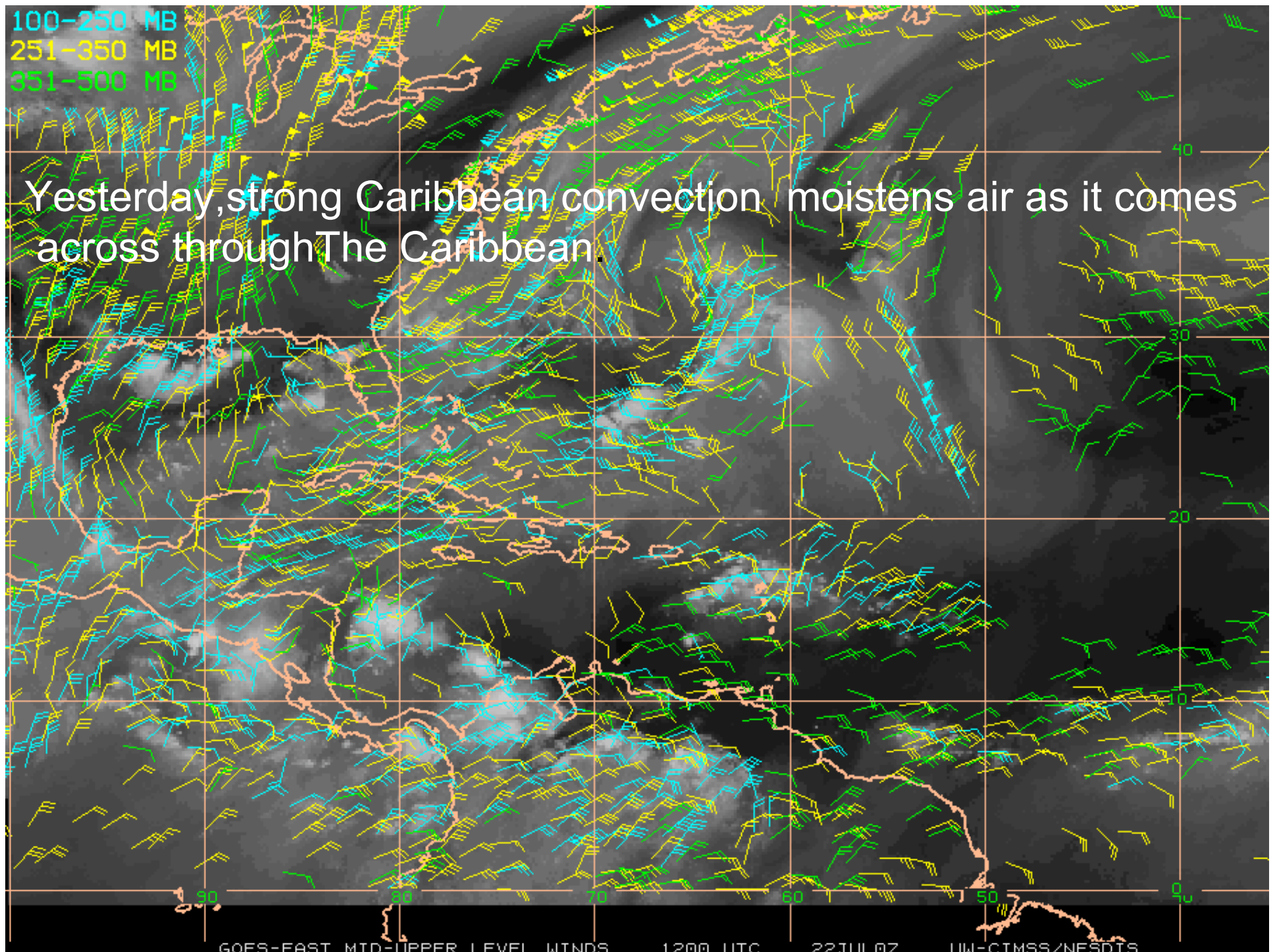
20070722.1145.g12.ch4 temp deg K

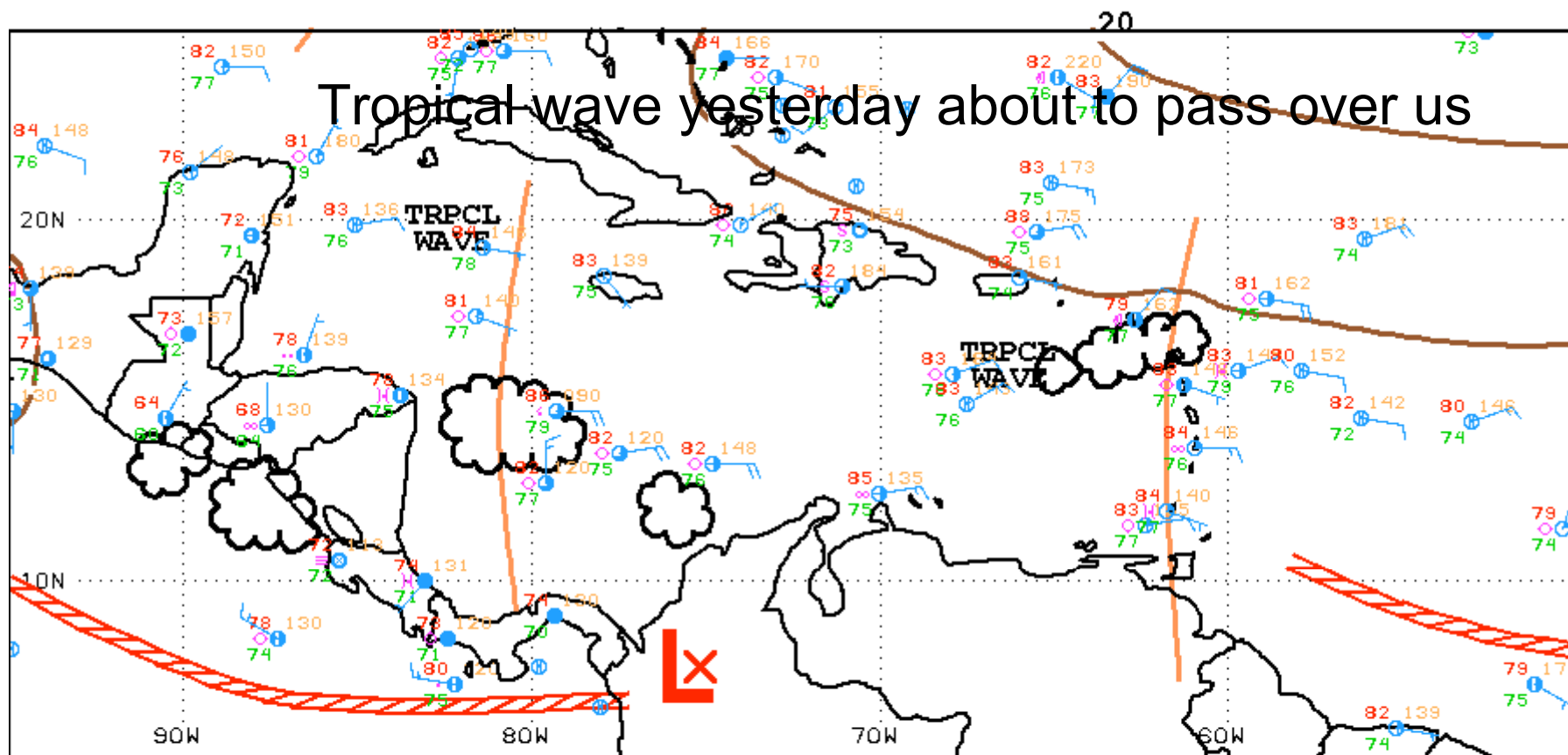




100-250 MB  
251-350 MB  
351-500 MB

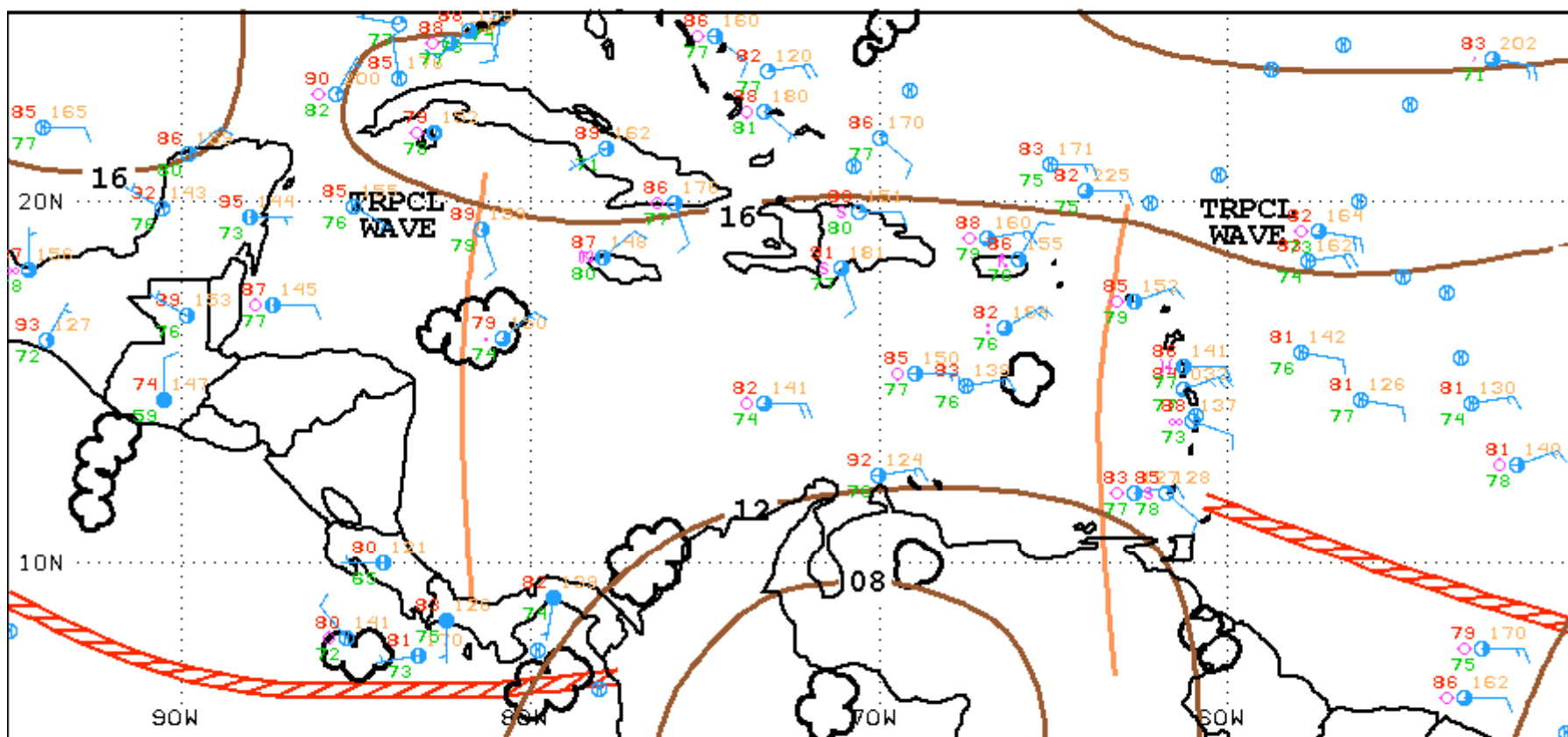
Yesterday, strong Caribbean convection moistens air as it comes across through The Caribbean.





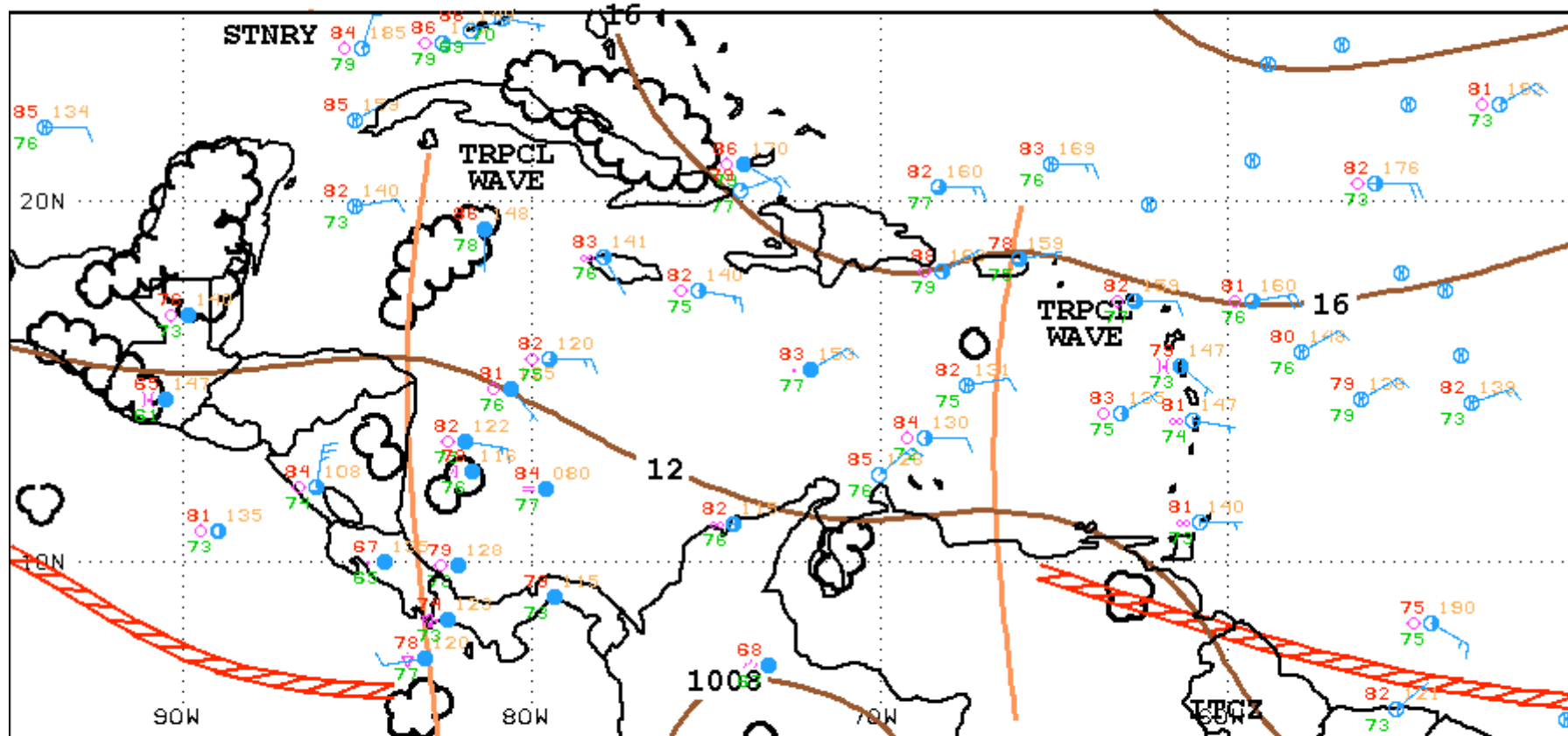
12Z CARIBBEAN SURFACE ANALYSIS  
 ISSUED: Sun Jul 22 14:49:04 UTC 2007  
 THUNDERSTORMS: SCALLOP LINES

TROPICAL PREDICTION CENTER  
 MIAMI, FLORIDA  
 BY TAFB ANALYST: RJW  
 COLLABORATING CENTERS: TPC OPC HPC



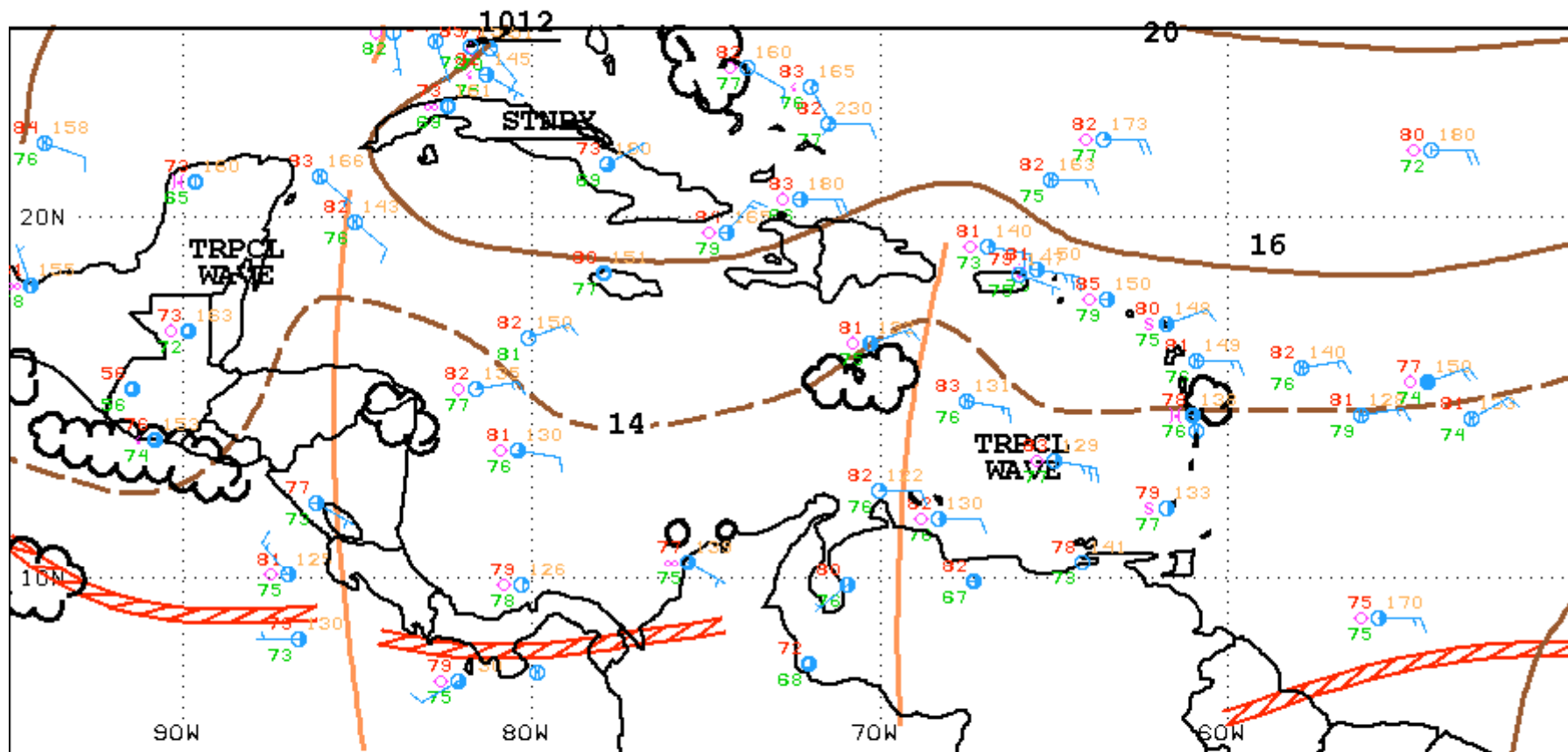
18Z CARIBBEAN SURFACE ANALYSIS  
ISSUED: Sun Jul 22 20:44:45 UTC 2007  
THUNDERSTORMS: SCALLOP LINES

TROPICAL PREDICTION CENTER  
MIAMI, FLORIDA  
BY TAFB ANALYST: FORMOSA  
COLLABORATING CENTERS: TPC OPC HPC

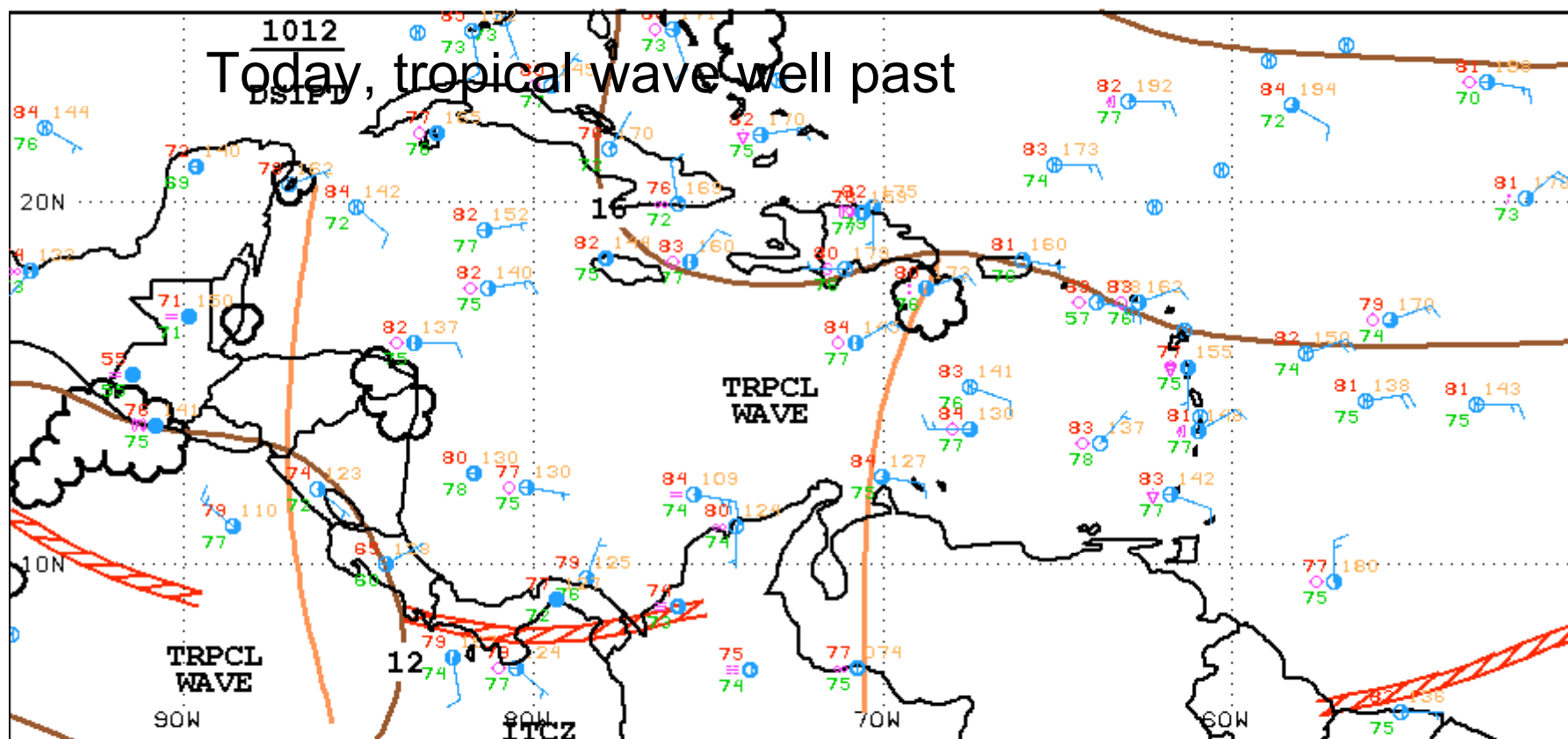


00Z CARIBBEAN SURFACE ANALYSIS  
 ISSUED: Mon Jul 23 02:31:37 UTC 2007  
 THUNDERSTORMS: SCALLOP LINES

TROPICAL PREDICTION CENTER  
 MIAMI, FLORIDA  
 BY TAFB ANALYST: FORMOSA  
 COLLABORATING CENTERS: TPC OPC HPC



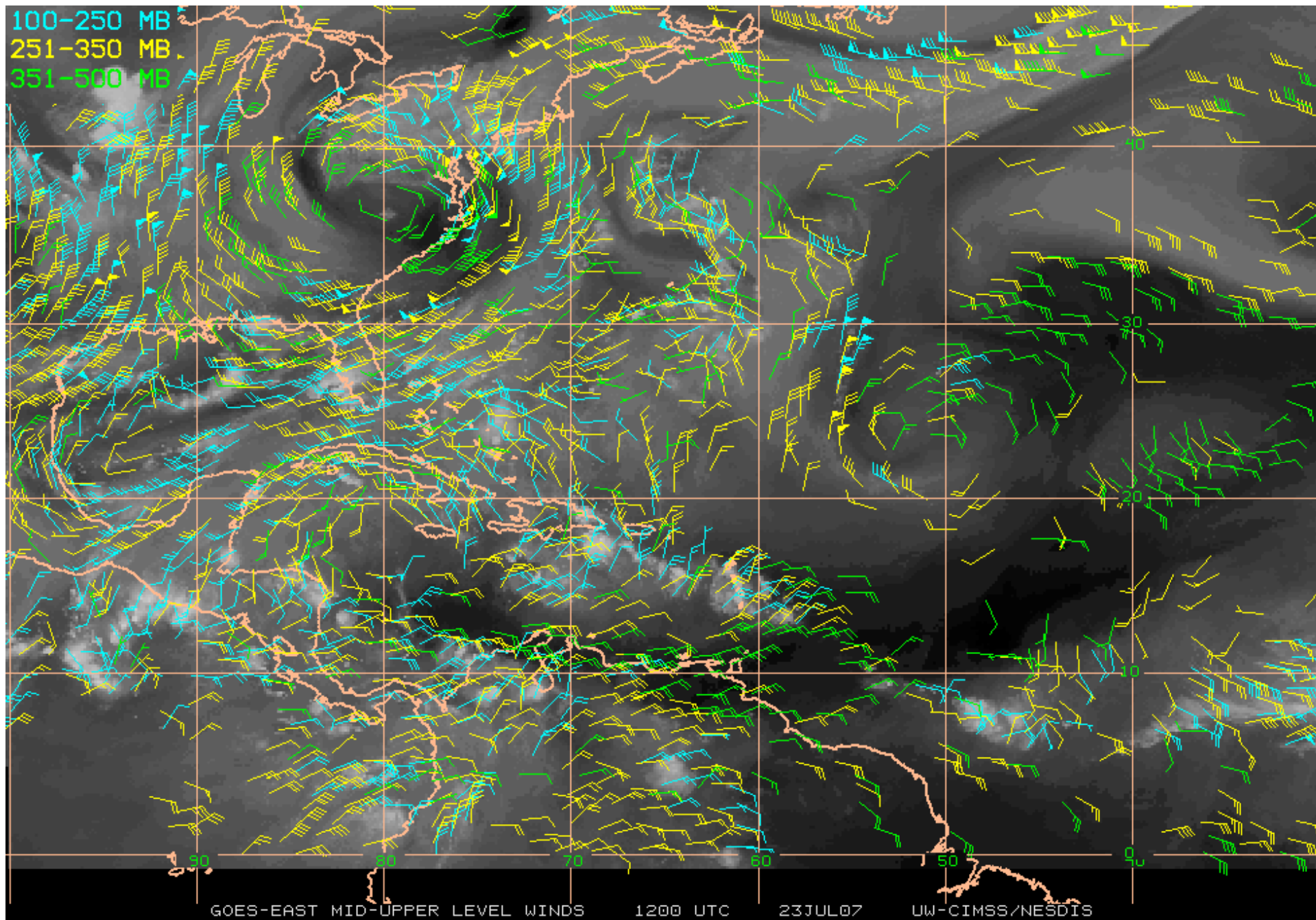




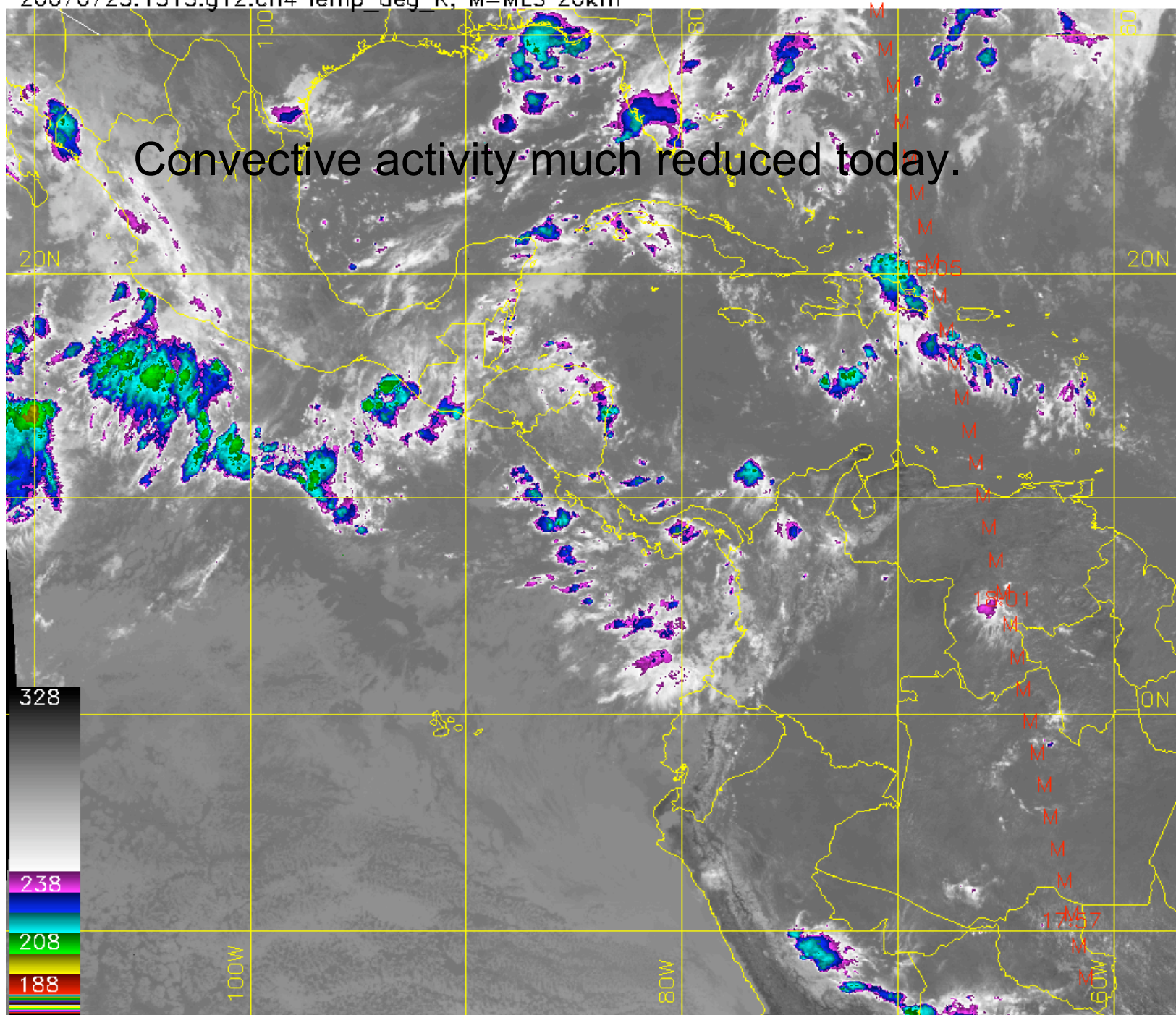
12Z CARIBBEAN SURFACE ANALYSIS  
ISSUED: Mon Jul 23 14:59:00 UTC 2007  
THUNDERSTORMS: SCALLOP LINES

TROPICAL PREDICTION CENTER  
MIAMI, FLORIDA  
BY TAFB ANALYST: MW  
COLLABORATING CENTERS: TPC OPC HPC





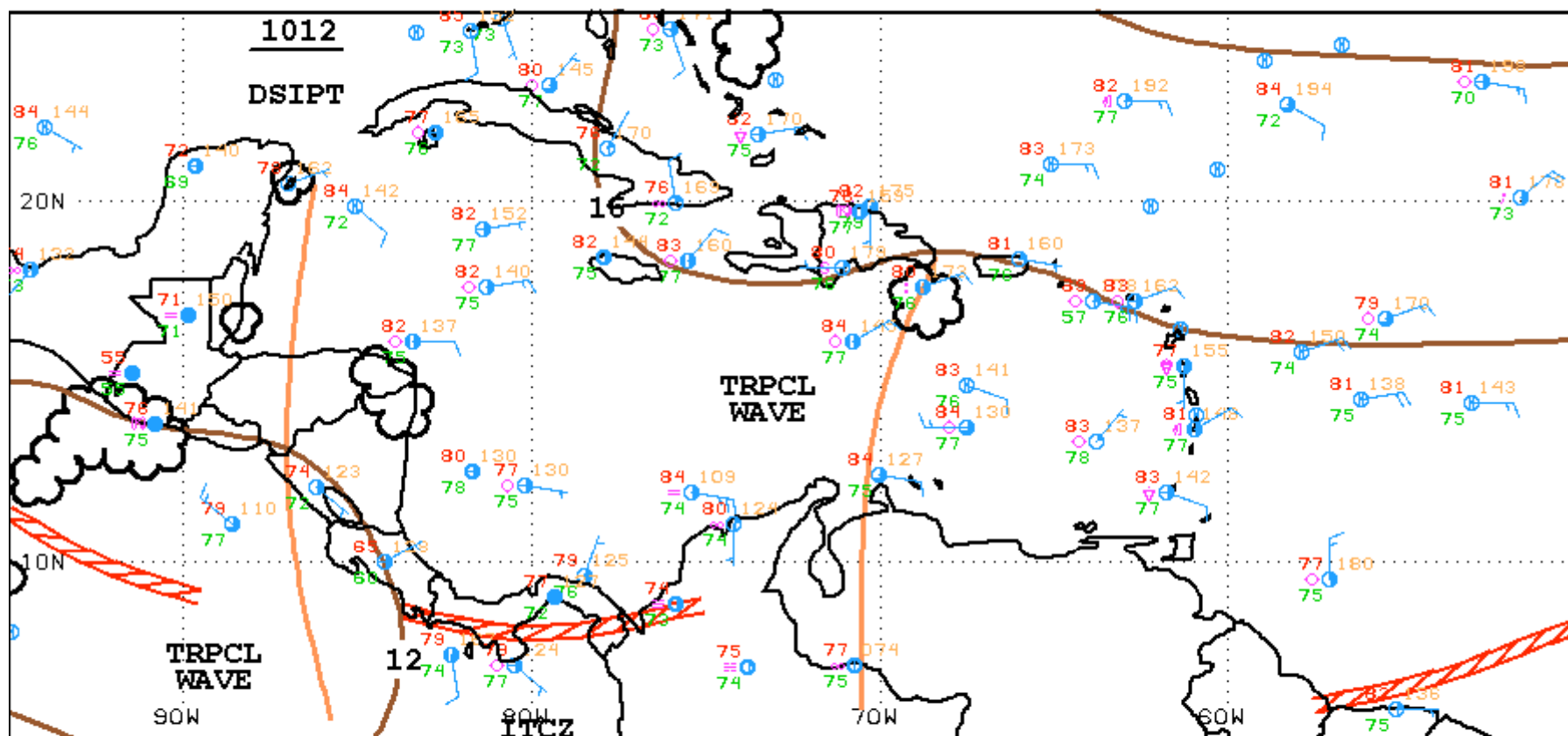
20070723.1515.g12.ch4 temp deg K, M=MLS 20km



# Forecast questions

- Where will convection be Tuesday and Wednesday?
- How strong will it be?
- When will the weather at SJO deteriorate in the afternoon?

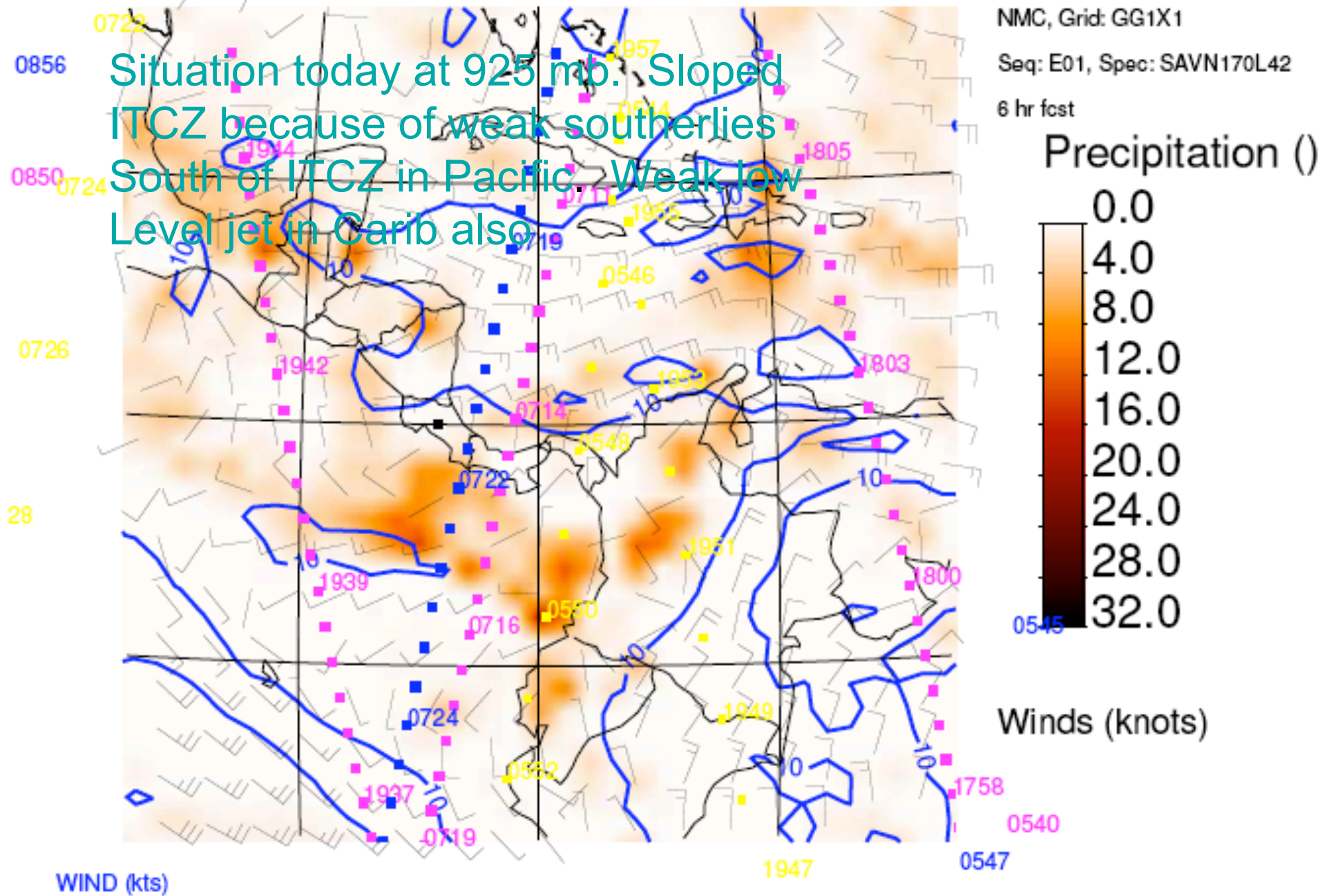




12Z CARIBBEAN SURFACE ANALYSIS  
 ISSUED: Mon Jul 23 14:59:00 UTC 2007  
 THUNDERSTORMS: SCALLOP LINES

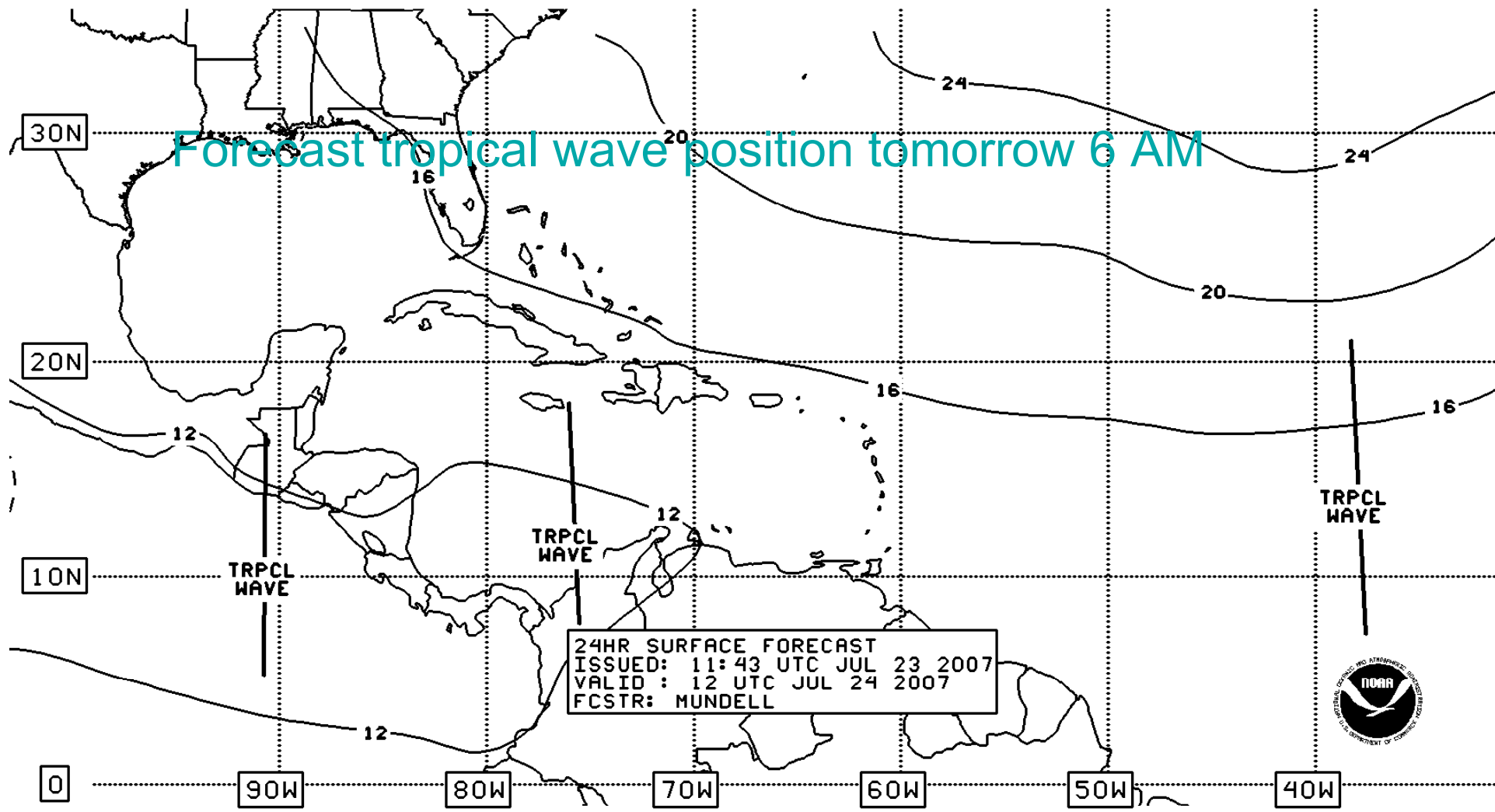
TROPICAL PREDICTION CENTER  
 MIAMI, FLORIDA  
 BY TAFB ANALYST: MW  
 COLLABORATING CENTERS: TPC OPC HPC

12 UTC on 23 July, 2007 at 925.0 mb





# Forecast tropical wave position tomorrow 6 AM

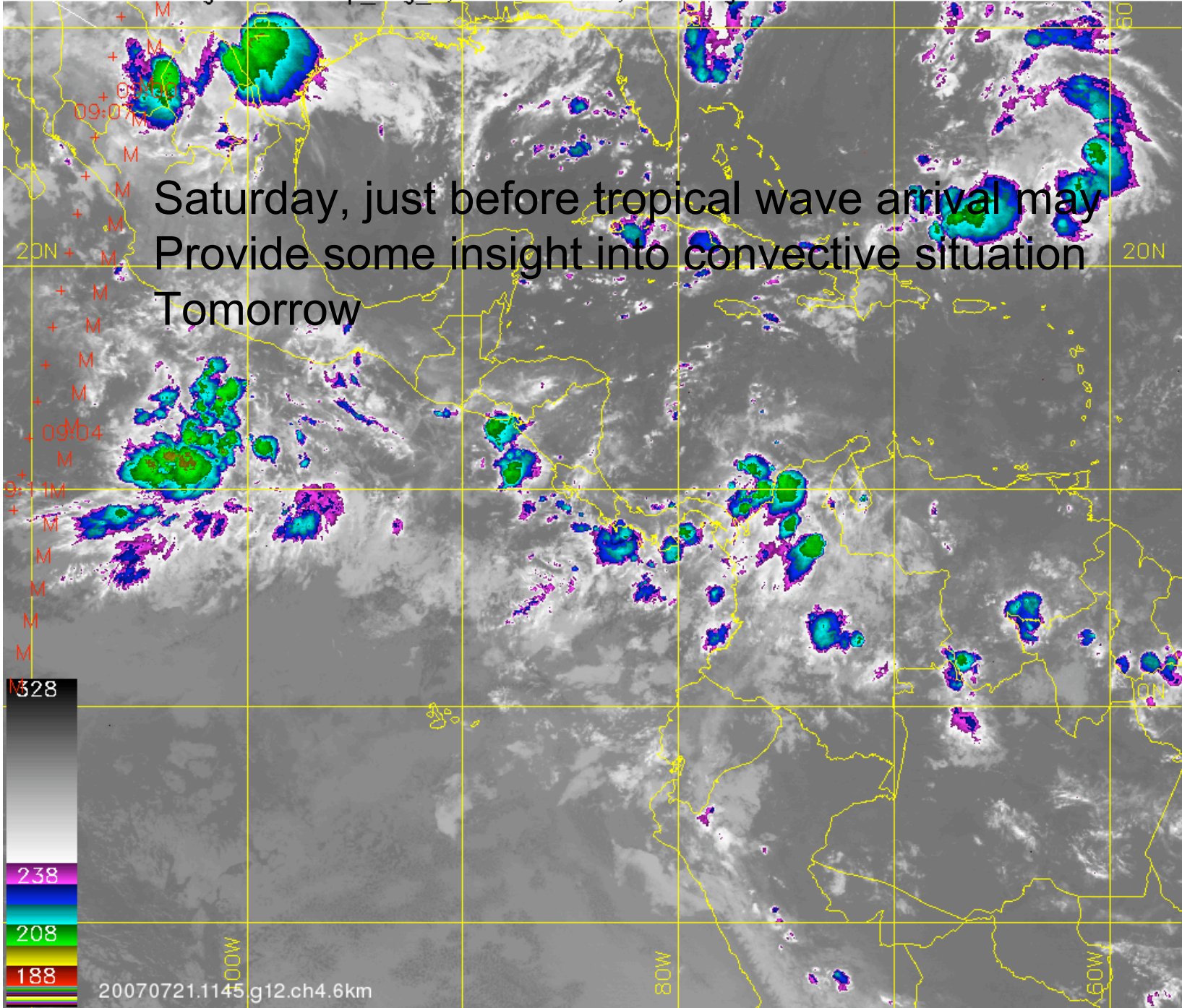


TRPCL  
WAVE



Saturday, just before tropical wave arrival may  
Provide some insight into convective situation  
Tomorrow

20070721.1145.g12.ch4.6km



12 UTC on 24 July, 2007 at 925.0 mb

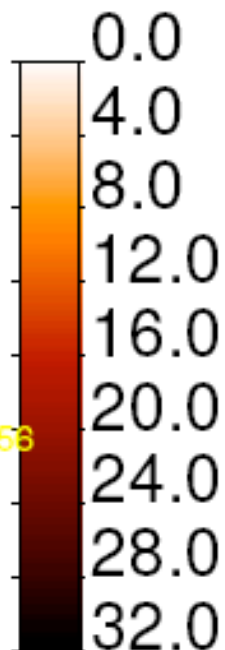
NMC, Grid: GG1X1

Seq: E01, Spec: SAVN170L42

30 hr fcst

Low level jet still weak, somewhat more  
Coherent southerlies in Pacific -- so weak  
ITCZ and some Panama bight convection

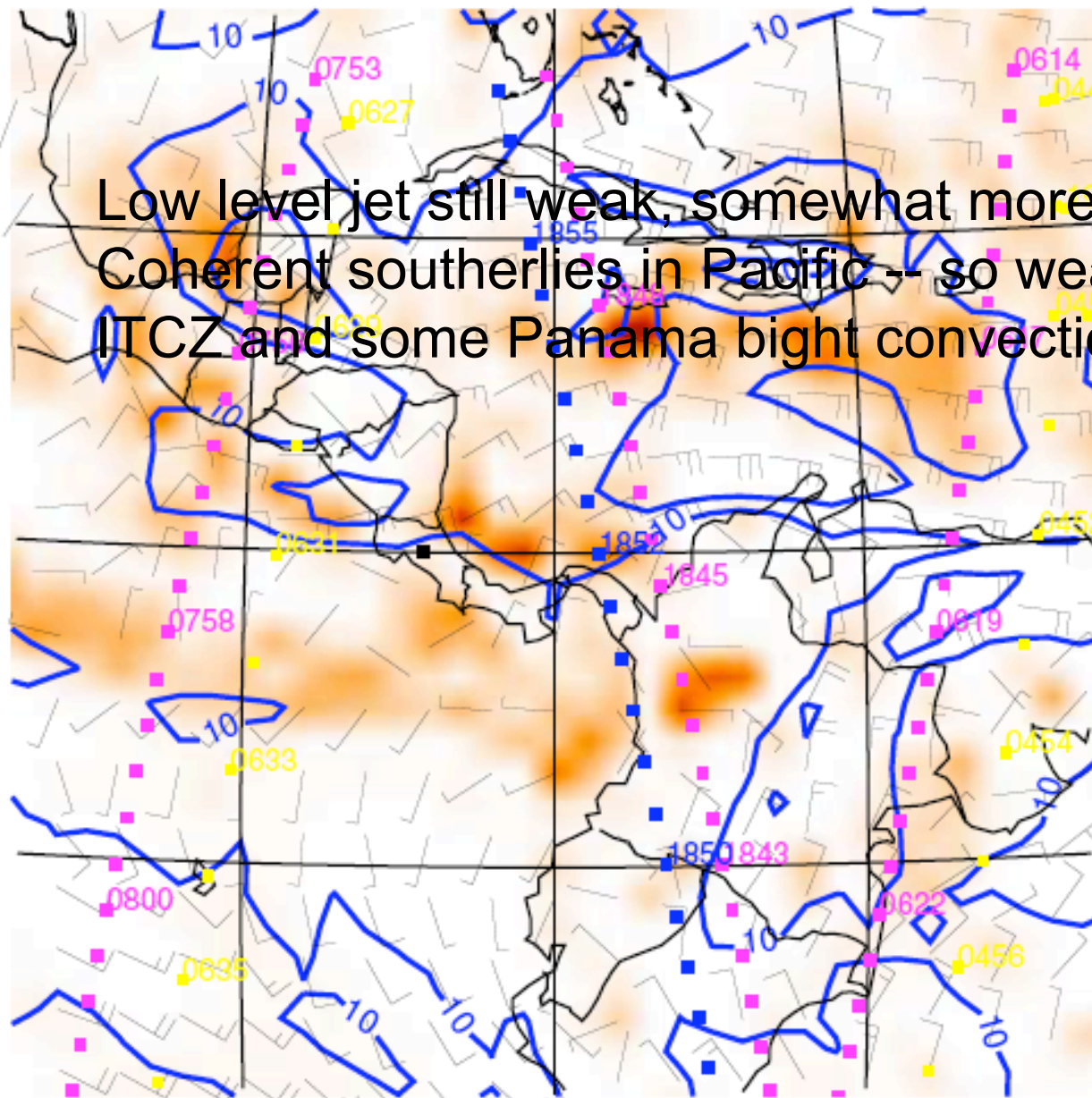
Precipitation (mm)



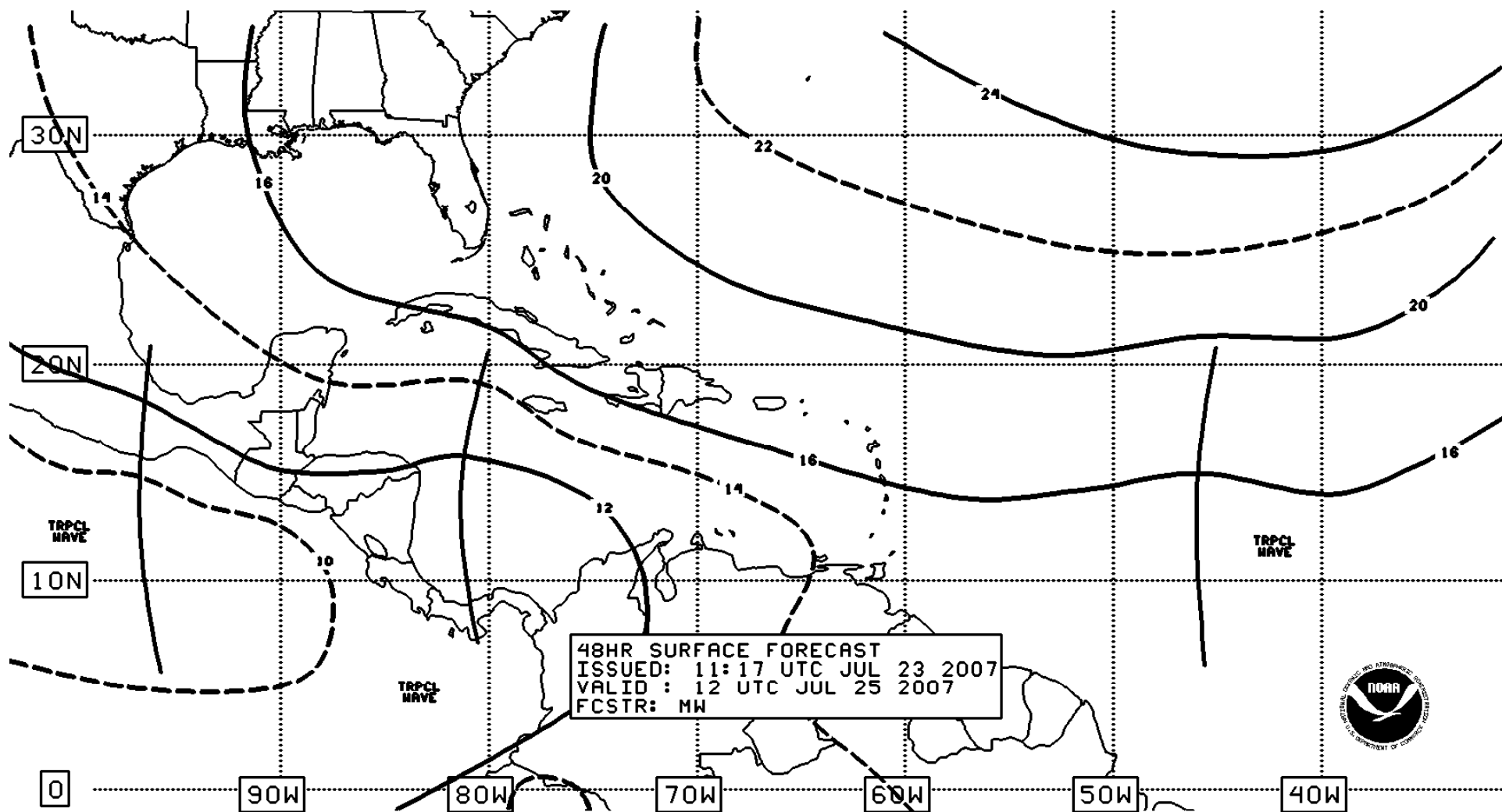
Winds (knots)

WIND (kts)

1840  
1847







NWS/NCEP - TROPICAL PREDICTION CENTER/TAFB

12 UTC on 25 July, 2007 at 925.0 mb

NMC, Grid: GG1X1

Seq: E01, Spec: SAVN170L42

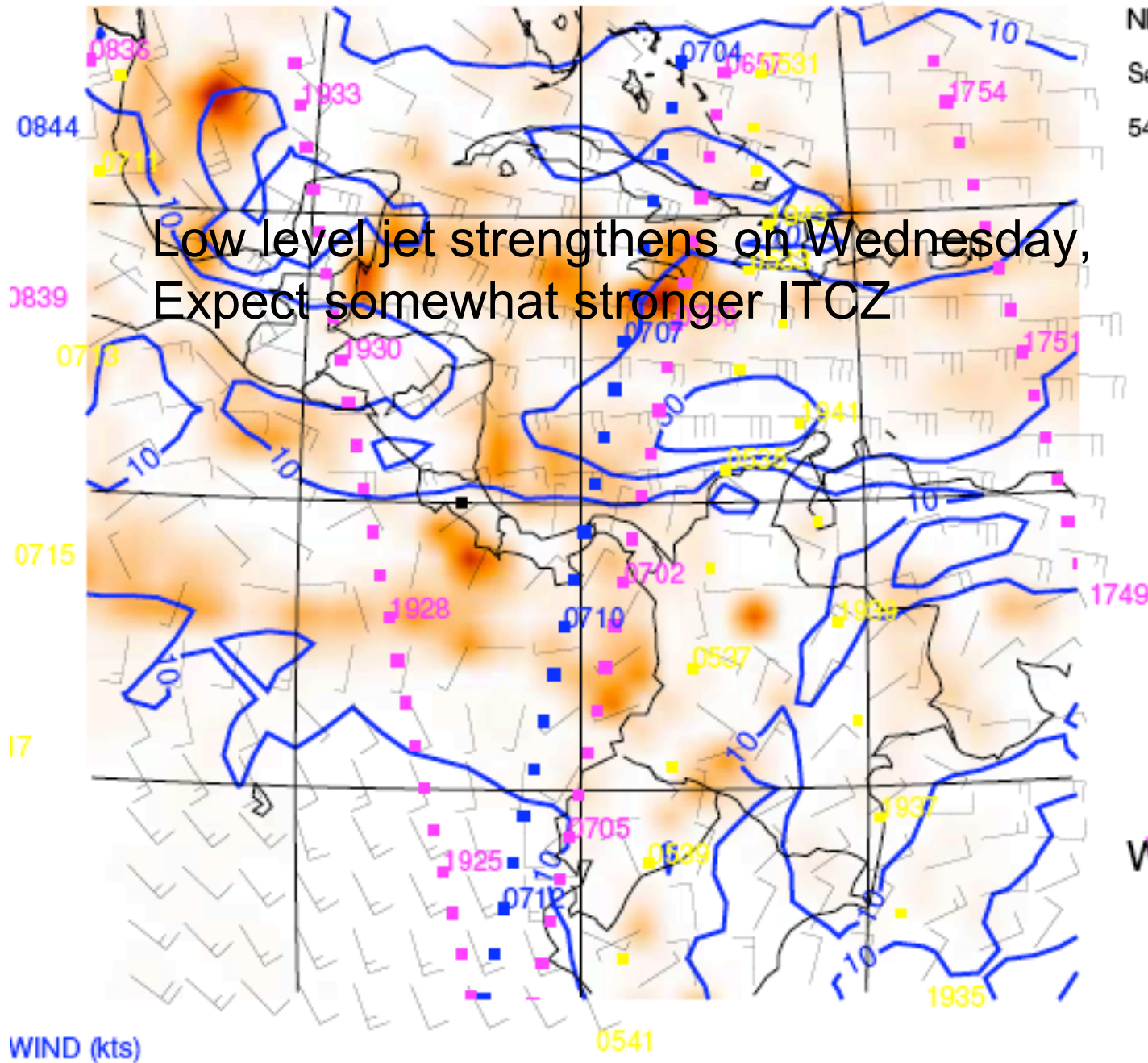
54 hr fcst

Precipitation ( )

0.0  
4.0  
8.0  
12.0  
16.0  
20.0  
24.0  
28.0  
32.0

Winds (knots)

Low level jet strengthens on Wednesday,  
Expect somewhat stronger ITCZ

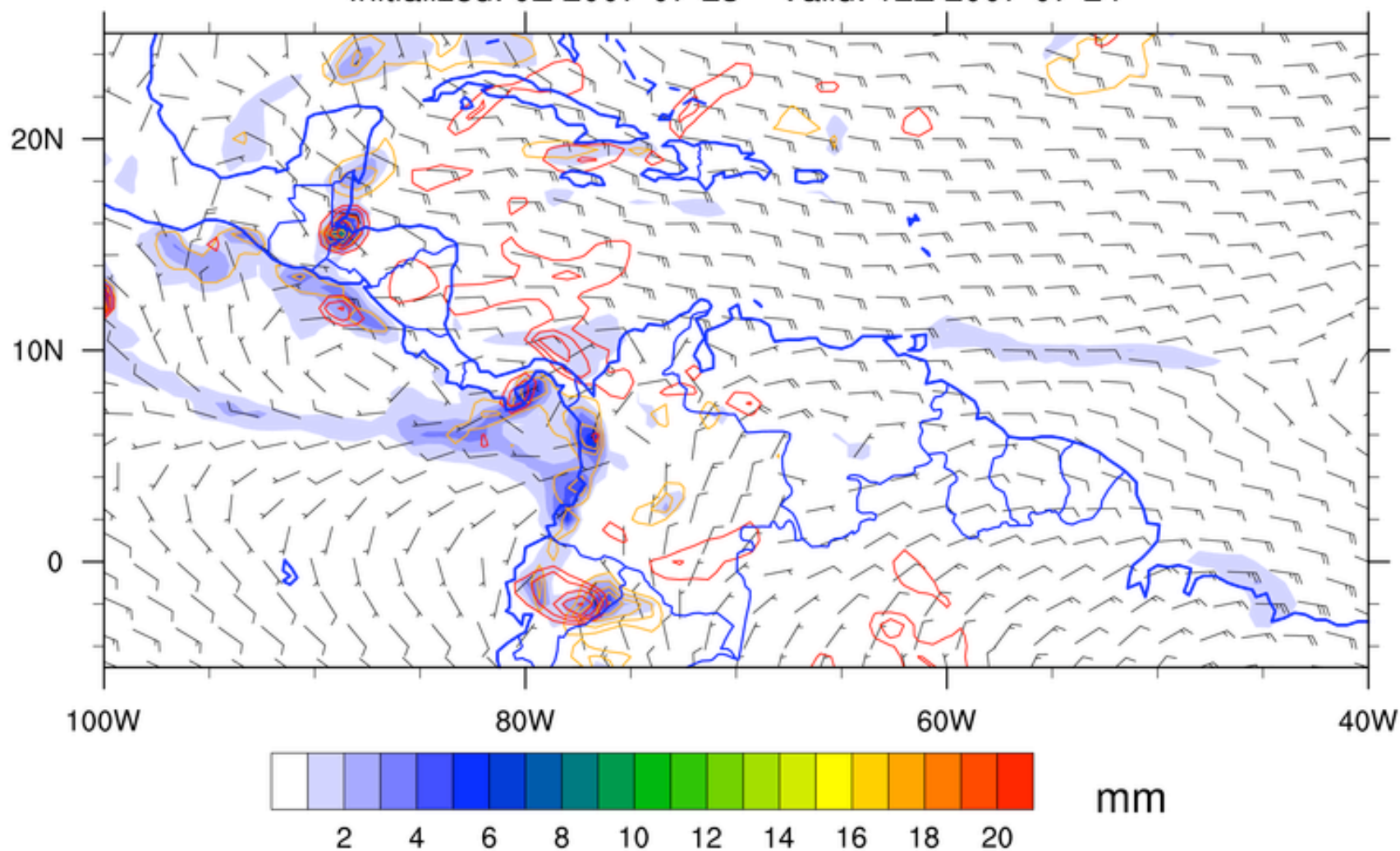




# GEOS-5 Forecast Model, $0.5^\circ \times 0.666^\circ$

3 Hr Precip (mm), 925 mb Winds (knots), 200&500 mb w (cm/s)

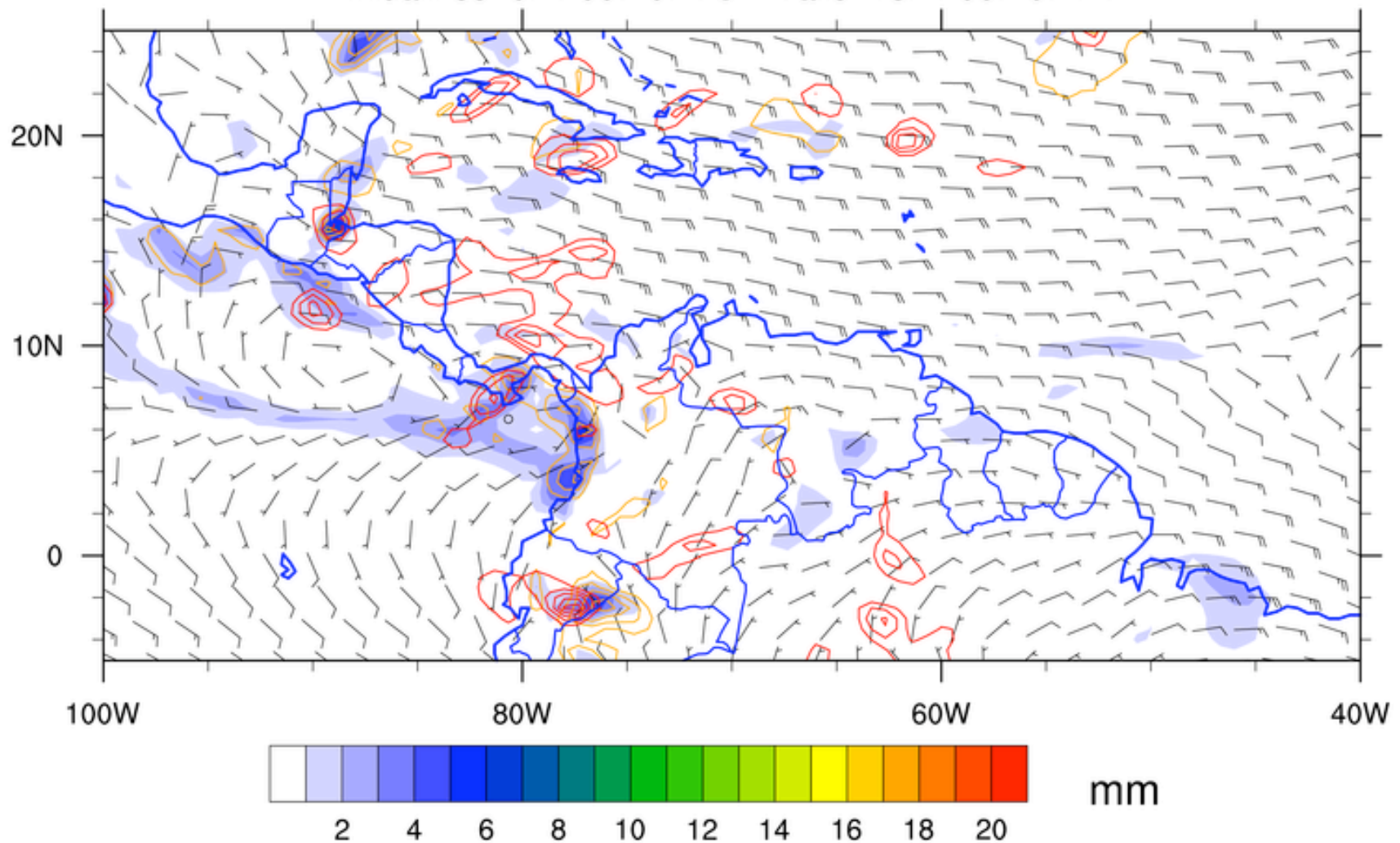
Initialized: 0Z 2007-07-23 Valid: 12Z 2007-07-24



# GEOS-5 Forecast Model, $0.5^\circ \times 0.666^\circ$

3 Hr Precip (mm), 925 mb Winds (knots), 200&500 mb w (cm/s)

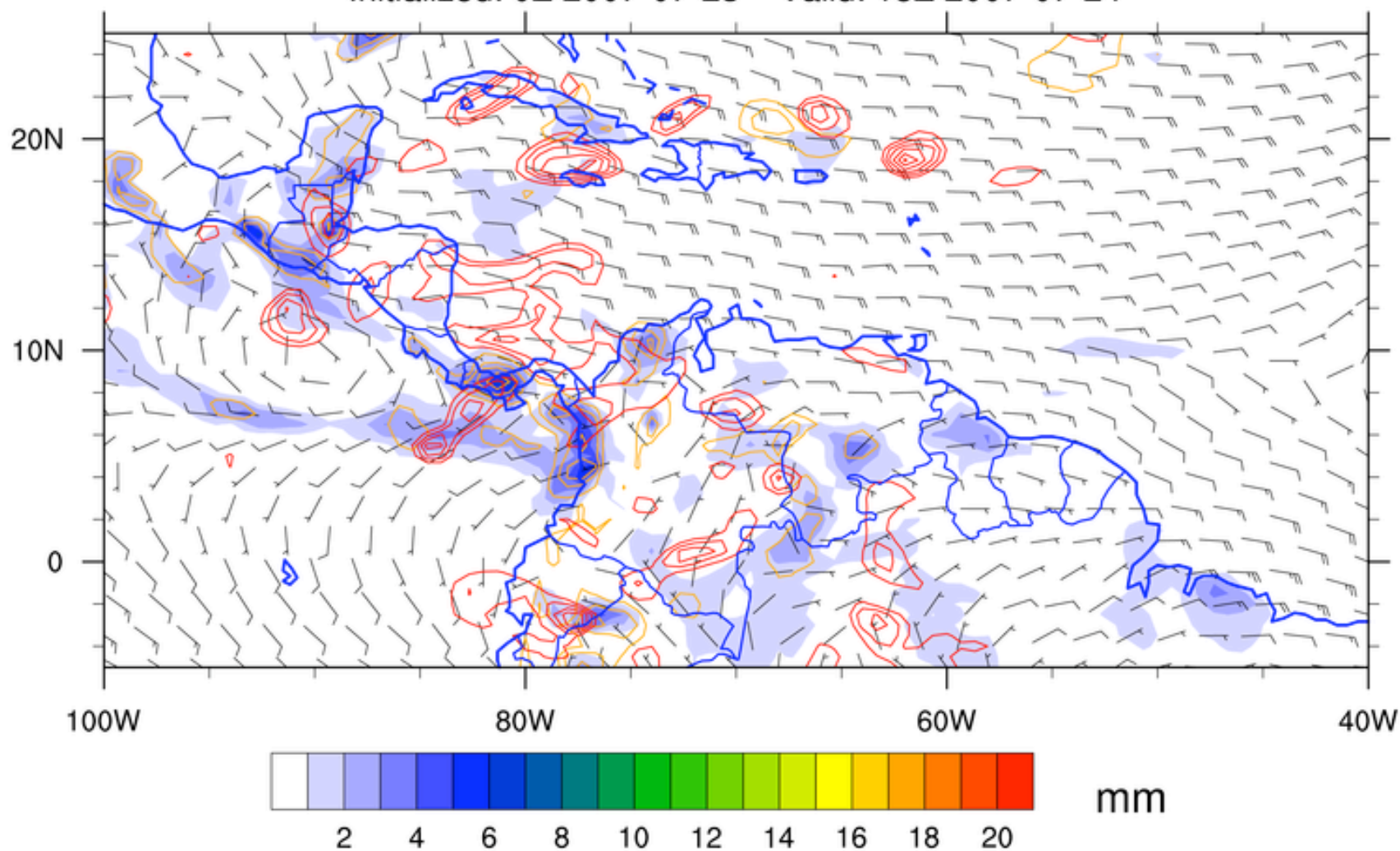
Initialized: 0Z 2007-07-23 Valid: 15Z 2007-07-24



# GEOS-5 Forecast Model, $0.5^\circ \times 0.666^\circ$

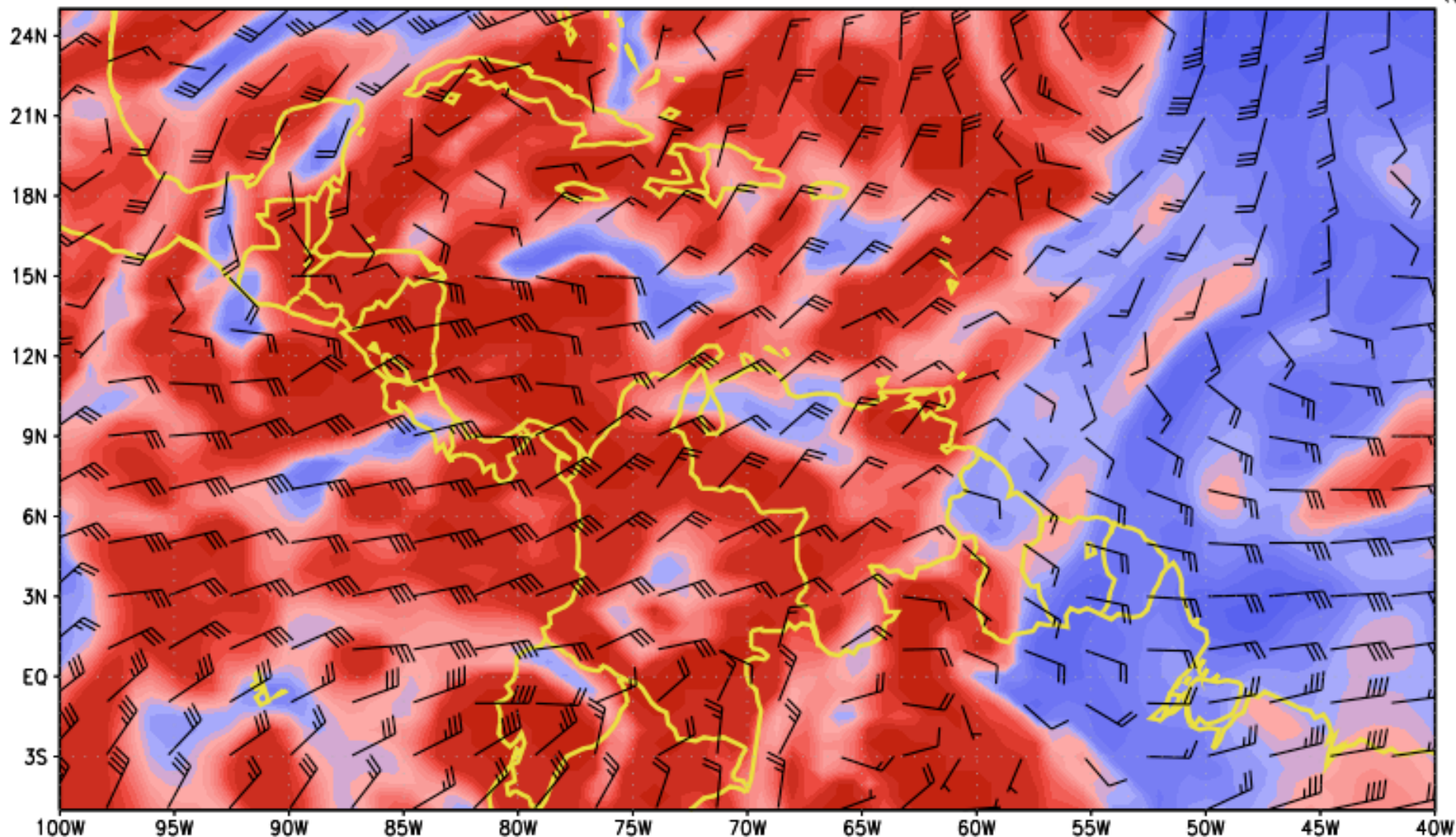
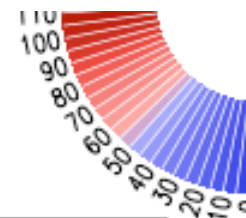
3 Hr Precip (mm), 925 mb Winds (knots), 200&500 mb w (cm/s)

Initialized: 0Z 2007-07-23 Valid: 18Z 2007-07-24

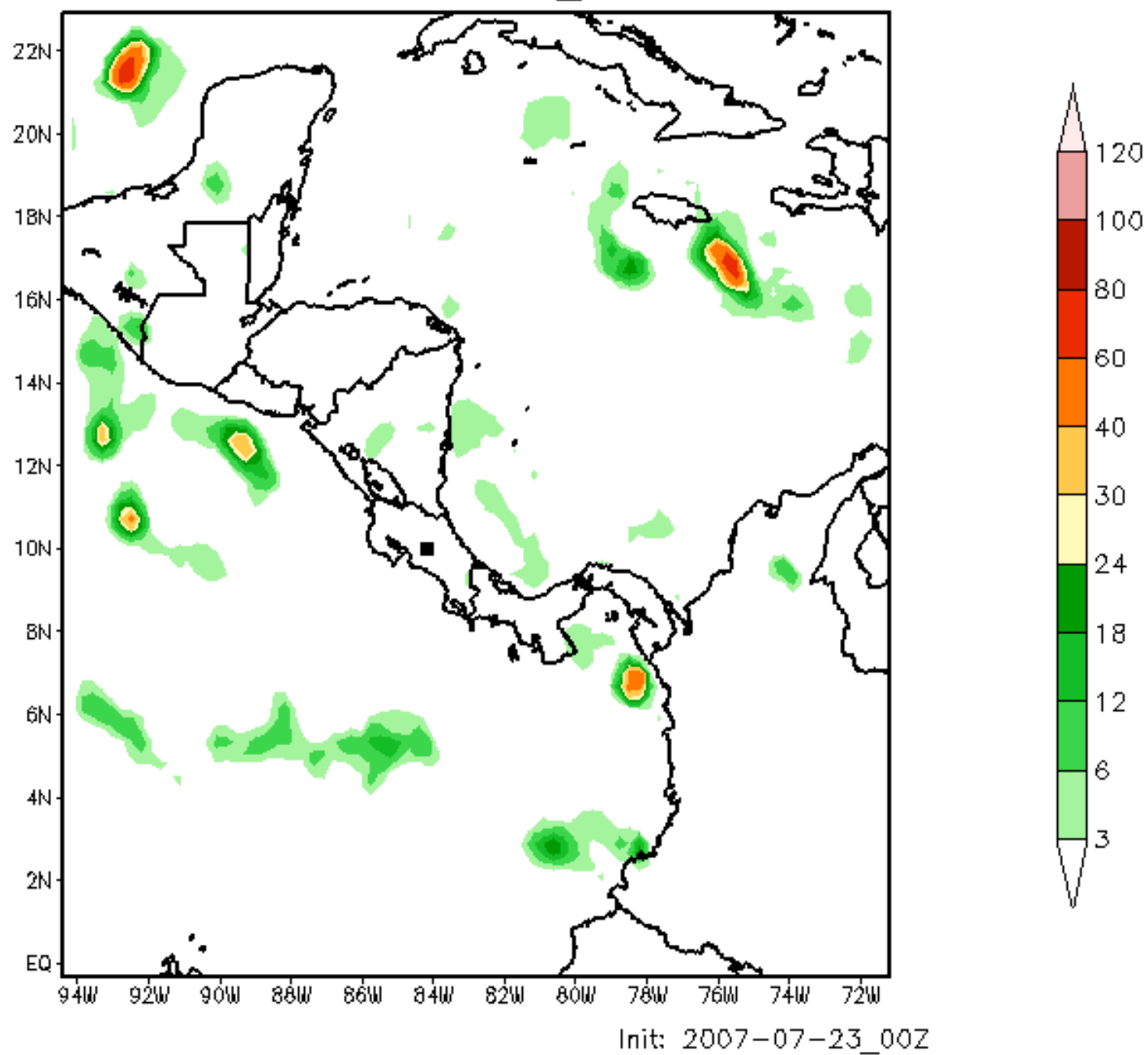




# 200 hPa Winds [knots] and Relative Humidity [%] Valid: Tue 15z 2007-07-24 ( $\tau = 39$ )

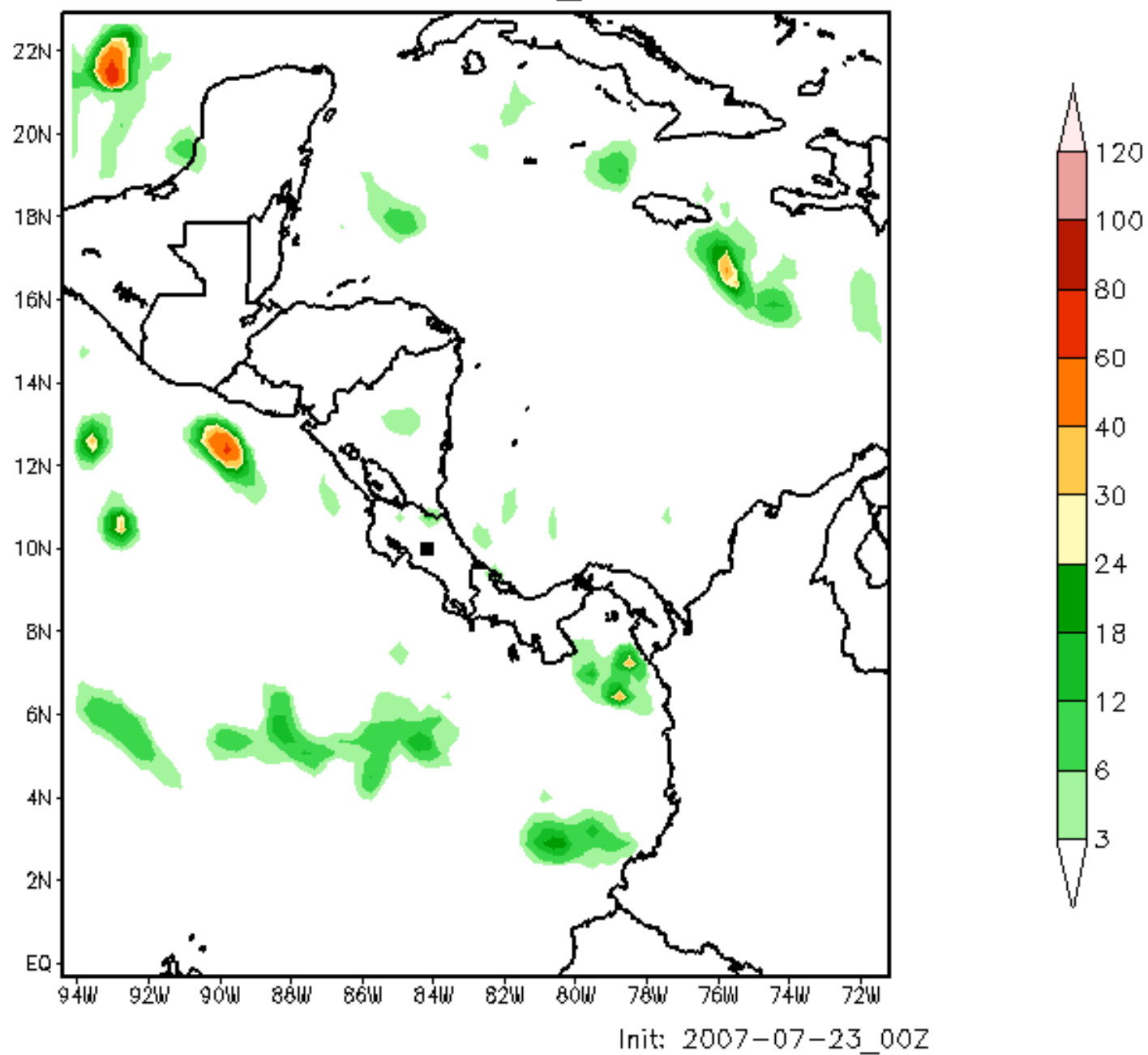


CIGEFI/UCR MM5: Precipitation in past 3 hrs (mm)  
2007-07-24\_12Z

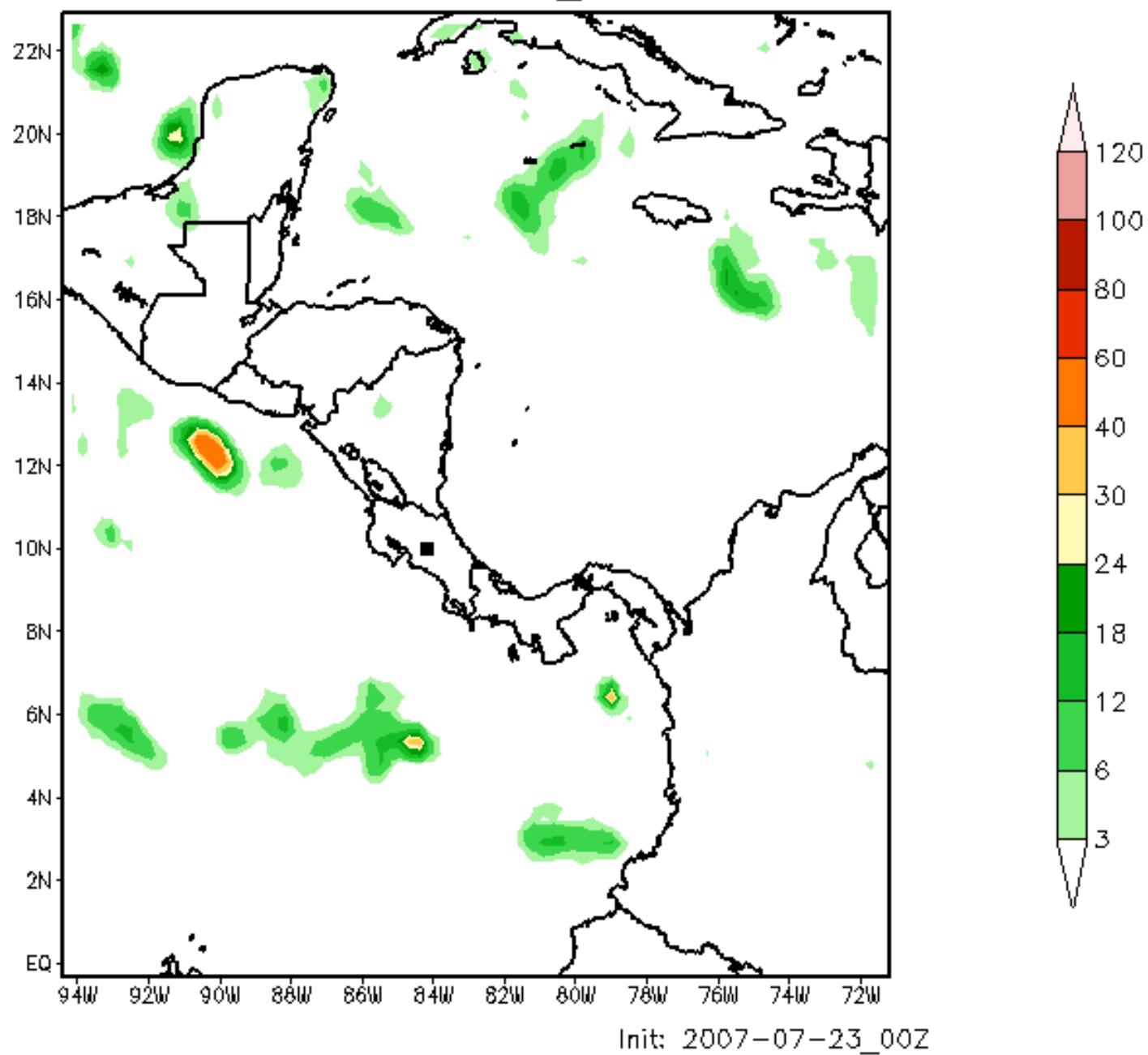




CIGEFI/UCR MM5: Precipitation in past 3 hrs (mm)  
2007-07-24\_15Z



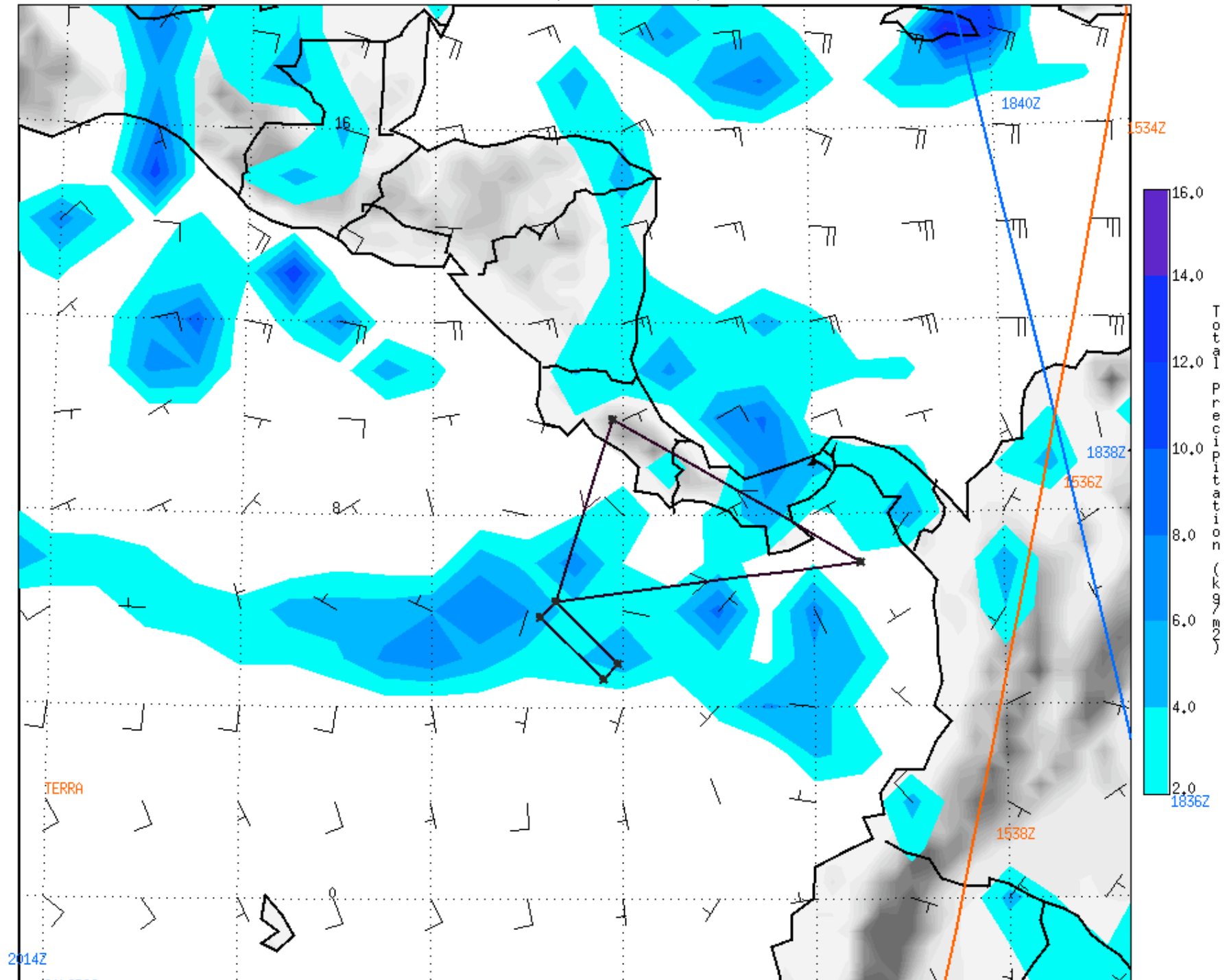
CIGEFI/UCR MM5: Precipitation in past 3 hrs (mm)  
2007-07-24\_18Z



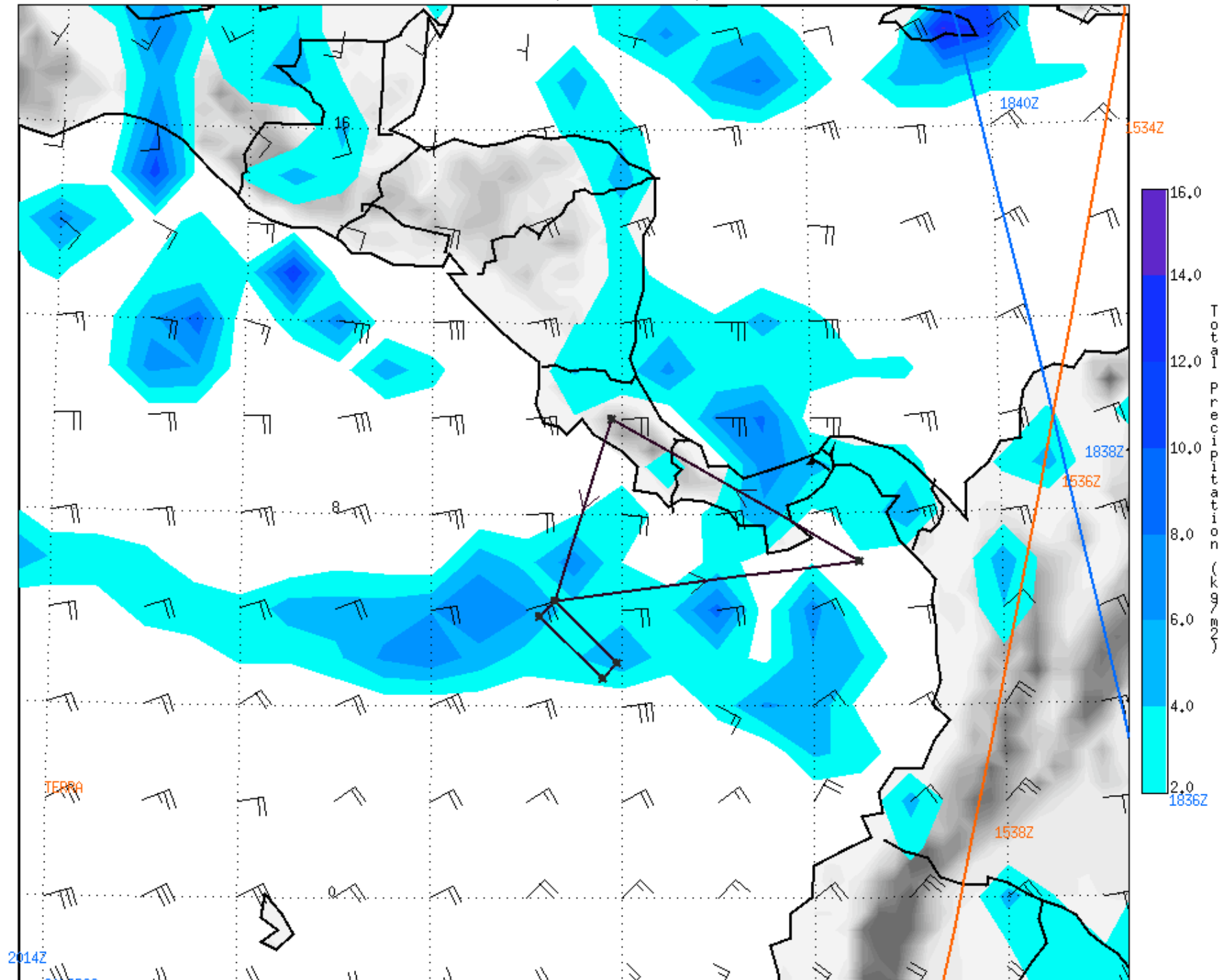
## Summary of convective forecast

- Tomorrow -- relatively weak Pacific ITCZ but reforming from weakness yesterday and today. Some bight convection, perhaps like Saturday. Caribbean relatively inactive
- Wednesday -- better day for the bight based on easterly wave position. More activity in the Caribbean.

INIT:2007072300 Val10:2007072410



INIT:2007072300 VALID:2007072410

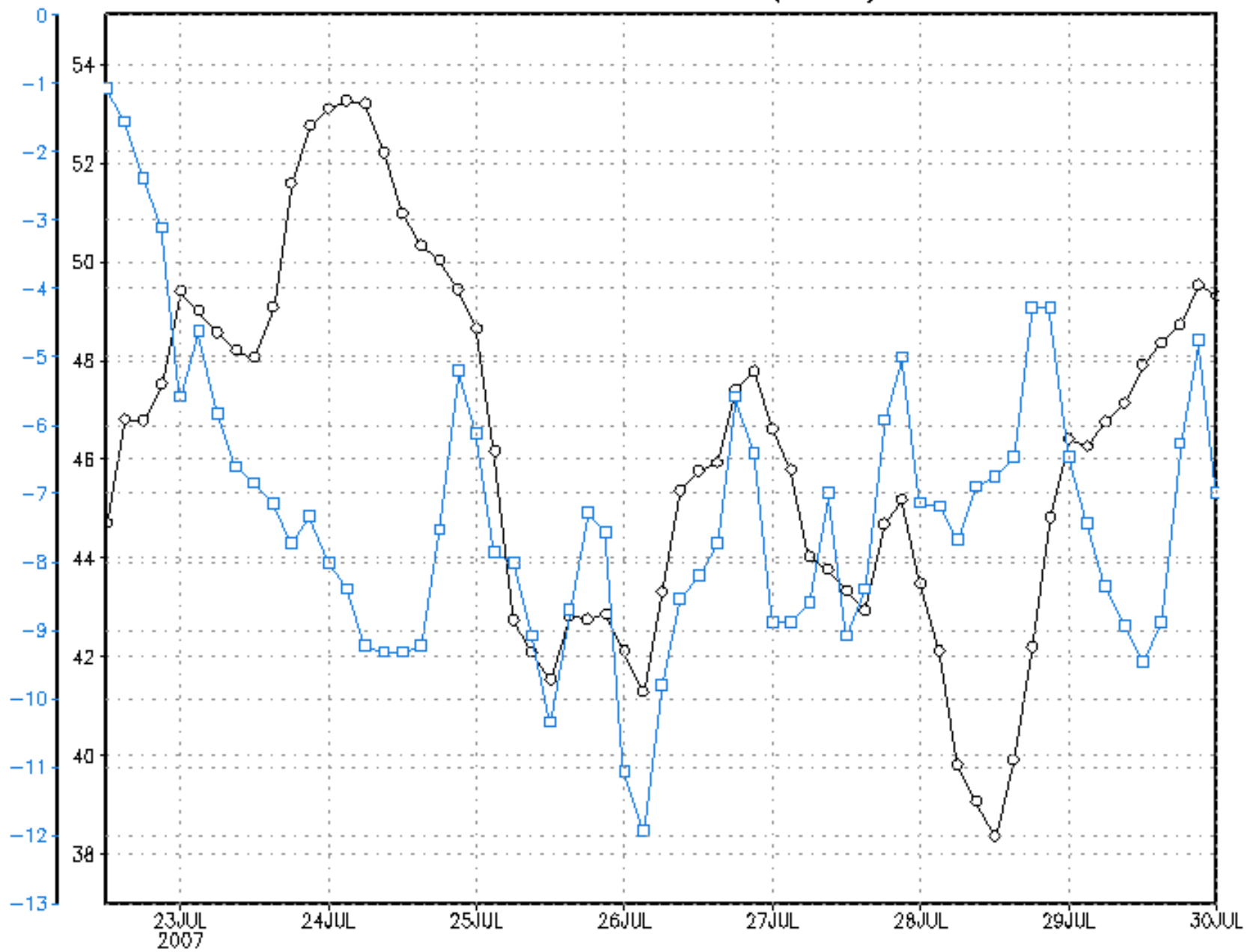




# Surface Weather Conditions

- Today have early wind shift. Somewhat drier conditions aloft mean earlier than normal rain, but not as copious
- Tomorrow -- easterlies increase (but not as much as forecast) -- some rains starting around 2 PM
- Wednesday -- less active day -- similar easterly winds but drier aloft. Rains starting no earlier than 2 PM (all we can really say at this point)

PWATclm, UGRD(blue)



UGRD, PWATclm(blue)

